

LISTING OF CLAIMS

1. (Currently Amended) A system, comprising:

a first voltage regulator having a supply input coupled to a common unregulated supply voltage, an enable input and a first supply output, the first voltage regulator selectively providing at the first supply output up to a first predetermined current level at a regulated voltage based upon the common unregulated supply voltage;

compare circuitry having an input coupled to a first unregulated supply voltage and an output having a value indicative of whether the first unregulated supply voltage is greater than a predetermined voltage level;

a second voltage regulator having a supply input coupled to the common unregulated supply voltage, an enable input responsive to the compare circuitry output and a second supply output, the second voltage regulator selectively providing at the second supply output thereof up to a second predetermined current level at a regulated voltage based upon the common unregulated supply voltage, the first supply output of the first voltage regulator being coupled to the second supply output of the second voltage regulator; and

switching circuitry operable responsive to the output of the compare circuitry for applying either the first unregulated supply voltage or a second unregulated supply voltage as the common unregulated supply voltage.

2. (Canceled).

3. (Currently Amended) The system of claim 1 2, wherein the supply input of the first voltage regulator is coupled to the supply input of the second voltage regulator.

4. (Currently Amended) The system of claim 1 2, wherein the first unregulated voltage is sourced from an external power supply.

5. (Previously Presented) The system of claim 4, wherein the second unregulated voltage is sourced from a battery.

6. (Currently Amended) The system of claim 1 2, wherein the regulated voltage provided by the second voltage regulator is less than the regulated voltage provided by the first voltage regulator.

7. (Previously Presented) The system of claim 1, wherein the first voltage regulator comprises a first transistor having a first conduction terminal coupled to the supply input thereof, a second conduction terminal coupled to the first supply output of the first voltage regulator and a control terminal, the transistor providing to the first supply output of the first voltage regulator the first predetermined current level.

8. (Original) The system of claim 7, further comprising biasing circuitry coupled to a control terminal of the first transistor, wherein the first transistor operates in a saturation mode of operation when enabled.

9. (Currently Amended) A system, comprising:

a first voltage regulator having a supply input coupled to a first supply voltage, an enable input and a supply output, the first voltage regulator selectively providing at the supply output up to a first predetermined current level at a regulated voltage based upon the first supply voltage when enabled and providing substantially no current when disabled;

compare circuitry having an input coupled to the first supply voltage and an output coupled to the enable input of the first voltage regulator and having a value indicative of whether the first supply voltage is greater than a predetermined voltage level; and

circuitry having a supply input coupled to the supply output of the first voltage regulator, wherein the first voltage regulator comprises a first transistor having a first conduction terminal coupled to the supply input of the first voltage regulator thereof, a second conduction terminal coupled to the supply output of the first voltage regulator and a control terminal, the transistor providing to the supply output of the first voltage regulator the first predetermined current level, and

wherein the first voltage regulator further comprises a second transistor having a first conduction terminal coupled to the supply input of the first voltage regulator, a control terminal coupled to the output of the compare circuitry and a second conduction terminal coupled to the control terminal of the first transistor.

10. (Previously Presented) The system of claim 1, wherein the switching circuitry comprises a transistor having a first conduction terminal coupled to one of the first/second unregulated supply voltages, a second conduction terminal coupled to the supply input of the first voltage regulator and a control terminal coupled to the output of the compare circuitry.

11. (Previously Presented) The system of claim 1, further comprising a volatile memory coupled to the first supply output.

Claims 12 - 15. (Canceled).

16. (Currently Amended) A device, comprising:

a first voltage regulator having a supply input, an enable input and a supply output, the first voltage regulator receiving a common unregulated supply voltage at the supply input and providing at the supply output a regulated voltage at up to a first predetermined current level when enabled and providing substantially no current when disabled, ~~and~~

a switching circuit for applying either a first unregulated supply voltage or a second unregulated supply voltage as the common unregulated supply voltage, and

a compare circuit having an input adapted to be coupled to the first unregulated supply voltage, for generating a signal at an output of the compare circuit having a value indicative of the first unregulated supply voltage appearing at the input being greater than a predetermined reference voltage, the output of the compare circuit being coupled to the enable input of the first voltage regulator and to control the operation of the switching circuit.

17. (Original) The device of claim 16, wherein the first regulator comprises a first transistor having a first conduction terminal coupled to the supply input thereof, a second conduction terminal coupled to the supply output of the first voltage regulator and a control terminal, the transistor providing to the supply output of the first voltage regulator up to the first predetermined current level.

18. (Original) The device of claim 17, further comprising biasing circuitry coupled to the control terminal of the first transistor for providing a predetermined biased voltage thereto, wherein the first transistor operates in a saturation mode of operation when activated.

19. (Previously Presented) A device, comprising:

a first voltage regulator having a supply input, an enable input and a supply output, the first voltage regulator receiving a supply voltage at the supply input and providing at the supply output a regulated voltage at up to a first predetermined current level when enabled and providing substantially no current when disabled,

wherein the first regulator comprises a first transistor having a first conduction terminal coupled to the supply input thereof, a second conduction terminal coupled to the supply output of the first voltage regulator and a control terminal, the transistor providing to the supply output of the first voltage regulator up to the first predetermined current level, and

wherein the first voltage regulator further comprises a second transistor having a first conduction terminal coupled to the supply input of the first voltage regulator, a control terminal coupled to the enable input and a second conduction terminal coupled to the control terminal of the first transistor.

20. (Previously Presented) The device of claim 16, further comprising a second voltage regulator having a supply input, an enable input and a supply output, the second voltage regulator receiving the common unregulated supply voltage at the supply input and providing at the supply output thereof a regulated voltage at up to a second predetermined current level when enabled, the supply output of the first voltage regulator being coupled to the supply output of the second voltage regulator.

21. (Original) The device of claim 20, wherein the supply input of the first voltage regulator is coupled to the supply input of the second voltage regulator.

22. (Previously Presented) The device of claim 20, wherein the first unregulated supply voltage is provided to the switching circuit from an external power supply.

23. (Previously Presented) The device of claim 20, wherein the first unregulated supply voltage is provided to the switching circuit from an external power supply and second unregulated supply voltage is provided to the switching circuit from a battery.

24. (Original) The device of claim 20, wherein the regulated voltage provided by the second voltage regulator is less than the regulated voltage provided by the first voltage regulator.

25. (Canceled).

26. (Original) The device of claim 16, further comprising a transistor having a first conduction terminal coupled adapted to be coupled to a battery, a second conduction terminal coupled to the output of the first voltage regulator and a control terminal coupled to the output of the compare circuit.

27. (Previously Presented) The device of claim 20, further comprising a compare circuit having an input adapted to be coupled to the first unregulated supply voltage, for generating a signal at an output of the compare circuit having a value indicative of the first unregulated supply voltage appearing at the input being greater than a predetermined reference voltage, the output of the compare circuit being coupled to the enable inputs of the first and second voltage regulators so alternately enable the regulators and further coupled to control the operation of the switching circuit to alternately select the first and second unregulated supply voltages as the common unregulated supply voltage.